

REMARKS

This is in response to the Office Action dated August 5, 2008. In view of the foregoing amendments and following representations, reconsideration is respectfully requested.

By the above amendment, claims 16, 17, and 18 are amended; claims 19, 20 and 21 are cancelled; and claims 22-23 are newly presented. Thus, claims 16, 17, 18, 22 and 23 are currently pending in the present application. Support for the changes to claim 16 can be found at least in Fig. 1 and paragraphs 0061 to 0066 and 0079 of the specification as originally filed. Support for the amendments to claim 18 can be found at least in paragraphs 0063 and 0077 of the specification as originally. Also, with respect to claim 22, support can be found in paragraph 0057.

Next, to facilitate the Examiner's reconsideration of the application, the specification and abstract have been reviewed and revised in order to make a number of minor clarifying and other editorial amendments. Due to the nature of the revision involved, a substitute specification and abstract has been prepared. No new matter has been added. Also enclosed is a Amarked-up@ copy of the original specification and abstract to show the changes that have been incorporated into the substitute specification and abstract. The enclosed copy is entitled AVersion with Markings to Show Changes Made.@

Next, on page 2 (item 3) of the Office Action, claim 21 is objected to under 37 CFR 1.75(c) as being in improper dependent form. Accordingly, claim 21 has been cancelled and rewritten in independent form as new claim 23, thereby obviating the above objection to claim 21 is now clearly obviated.

Next, on page 3 (item 5) of the Office Action, claims 20 and 21 are rejected under 35 U.S.C. 112, second paragraph. In response, claim 20 has been cancelled and rewritten as new claim 22. The new claim replaces the term “cuff” with the term -- pawl --. As shown in Fig. 2, a pawl 11 is formed at an end of the leaf spring 9. Thus, the cancellation of claim 20 and the presentation of new claim 22 should overcome the rejection under 35 U.S.C. 112, second paragraph. Further, as described above, claim 21 has been cancelled and replaced with new independent claim 22. The new claim has been drafted to clearly define the sprinkler head that was previously recited in cancelled claim 21.

Next, on pages 3-6 of the Office Action, claims 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Simons (U.S. Patent No. 5,072,792). Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Simons reference. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simons in view of Ponte (U.S. Patent No. 6,082,463). It is submitted that the present invention, as defined in the new and amended claims, now clearly distinguishes over the Simons and Ponte references for the following reasons.

Simons discloses a concealed sprinkler head assembly including a cover plate 32 and a sleeve surrounding a sprinkler head 1. However, as will be explained below, there are substantial differences between the claimed invention and the Simons assembly.

In the present invention, as defined in claim 16, the mount 3 has a cylindrical configuration and a hole extending therethrough. An upper portion of the mount is fixed to the housing 1 and the lower portion of the mount forms a flange configuration 13.

Also, a low melting point alloy 17 is introduced into the hole of the mount 3, and the

cover plate 2 and the mount 3 are connected to each other by solidifying a molten low melting point alloy 17 after the low melting point alloy is melted and has flowed out of the hole of the mount into a gap 16 formed between the flange 13 and the cover plate 2.

In contrast, the Simons sprinkler head assembly employs a U-shaped clip 31 and a layer of fusible metal to connect the lower leg of the clip 31 to a peripheral edge of the cover plate 32 (see Fig. 5; and col. 4, lines 18-22). The clip 31 is formed by bending a metal sheet.

Clearly, the clip 31 is a U-shaped structure, and not a cylindrical configuration. Therefore, the Simons clip only has a space between the upper and lower legs, and thus it obviously does not form a through hole as required in claim 16. Also, the lower portion of the clip 31 is one leg of a U-shape, and thus does not form the required flange configuration.

Further, a low melting point alloy is not introduced into the clip 31, and when the cover plate 32 and the clip 31 are connected to each other, a low melting point alloy does not flow out of the hole of the mount into a gap between the flange of the mount and the cover plate.

Therefore, the mount of the present invention and the clip of Simons et al. are completely different in their construction and function. And thus, independent claim 16 clearly distinguishes over the Simons reference. Note that independent claim 23 includes all the limitations of claim 16 and is therefore similarly allowable.

Further, claim 18 has been amended to clarify that a notch 14 is formed in the cover plate connecting surface of the mount, and the notch serves as an alignment means when connecting the mount 3 to the housing 1. The aligning operation is carried out to ensure that the inclined face of the flange 13 comes into surface contact with the cover plate 12 when connecting the

mount to the housing.

In the Simons assembly the foot 30 is inclined so that it follows the inclined surface of the cover plate 32, and the U-shaped clip 31 is connected to the foot 30 by merely being inserted over the foot 30. Thus, the clip 31 clearly lacks the claimed aligning means for ensuring that the inclined face of the clip comes into surface contact with the cover plate.

Further, claim 22 requires a pawl 11 (Fig. 2) that is formed in an end of the leaf spring to be brought into contact with the housing, and the pawl is locked in a cutout defined in a peripheral edge of the housing. Thus, claim 22 clearly distinguishes over the Simons reference. The Ponte reference (U.S. 6,082,463) merely discloses a leaf spring 68 that engages a circumferential shoulder of sleeve 62 and has a plurality of spring fingers 72 that urge the rim of the cover 58 away from the sleeve 62. Accordingly, it is submitted the collective teachings of the Simons and Ponte references do not include a pawl locked in a cutout defined in a peripheral edge of the housing (sleeve in Ponte). Thus, it is submitted that claim 22 is clearly allowable over the prior art of record.

The remaining claims depend, directly or indirectly, from claim 16 and are therefore allowable at least by virtue of their dependencies.

In view of the above, it is submitted that the present application is now clearly in condition for allowance. The Examiner therefore is requested to pass this case to issue.

In the event that the Examiner has any comments or suggestions of a nature necessary to place this case in condition for allowance, then the Examiner is requested to contact Applicant's undersigned attorney by telephone to promptly resolve any remaining matters.

Respectfully submitted,

Yasuaki KOIWA

By: 

Michael S. Huppert
Registration No. 40,268
Attorney for Applicant

MSH/kjf
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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